Amendments to the Specification:

Please replace the paragraphs beginning at page 4, line 27 and extending through page 5, line 13, with the following amended paragraphs:

Figure 1A is a schematic representation of one aspect of a proteinase enzyme sensor (10) made in accordance with the present invention, wherein a sample reservoir (1) is shown in fluid communication (13) with a reaction site (2) and a collection area (3).

Figure 1B is a cross-sectional side view of the proteinase enzyme sensor of Figure 1A illustrating a sample reservoir (1), in fluid communication (13) with a reaction site (2), and a collection area (3), which contains an absorbent pad (4).

Figure 1C is a cross-sectional side view of another aspect of a proteinase enzyme sensor made in accordance with the present invention illustrating a sample reservoir (1), a plurality of reaction sites (2), and a collection area (3), which contains an absorbent pad (4).

Figure 2 is a schematic representation of an example of an assay for detection of proteinase enzymes, illustrating a complex (9) that includes a signal element (6), a particle (7), a target antibody (5), and a target proteinase enzyme (8), and illustrating a conjugate (12) that is formed when complex (9) binds to a capture antibody (30) located on the surface of the reaction site (11).

Figure 3A is a schematic representation of one aspect of a proteinase enzyme sensor made in accordance with the present invention illustrating a housing (15), a sample reservoir (1) in fluid communication (13) with ~~having~~ a plurality of reaction sites (2), and a collection area (3), wherein each reaction site (2) includes a viewing area (16).

Figure 3B is a cross-sectional side view of a proteinase sensor of Figure 3A illustrating a sample reservoir (1) in fluid communication (13) with a plurality of reaction sites (2) and a collection area (3).

Figure 4 is a schematic representation of a proteinase sensor (10) made in accordance with the present invention demonstrating the detection of proteinase enzymes and showing a sample chamber (40) and a plurality of reaction sites (2), more specifically, reactions sites (20), (21), (22), (23), (24), and (25).

Please replace the paragraph beginning at page 10, line 28, with the following amended paragraph:

In another aspect of the invention, a sample of fluid is removed with a small pipette from the chronic wound of a human or animal. The sample is then added to the sample chamber (40) of a sensor (10) as shown in Figure 4, which contains polystyrene beads coated with target antibodies and a dye. If a proteinase enzyme is present in the chronic wound fluid, it will bind to the target antibody that is bindable to the target enzyme and form a target antibody proteinase enzyme complex. The sample containing the complex flows to the first reaction site and location of capture antibodies. Each reaction site, for example, each reaction site 20, 21, 22, 23, 24, and 25 illustrated in Figure 4, has different capture antibodies bindable to only one proteinase enzyme. Capture antibodies bindable to the proteinase enzyme present in the complex bind the complex to form a conjugate. Conjugates are held in the reaction site and any complexes that did not form conjugate flow to the next reaction site where the same process takes place. Alternatively, sample could flow down one fluid communication means and aliquots of the sample could flow to individual reaction sites positioned along the fluid communication means. Once the fluid has passed through all reaction sites, any remaining sample flows to a collection area. Each reaction site contains capture antibodies known to bind to a specific

target proteinase enzyme. The conjugate formed in each reaction site results in an increasing concentration of beads containing the dye molecule. The concentration of beads held by the conjugate causes a detectable or measurable manifestation of the signal element, such as the presence of a color. Alternatively, the signal element could be a fluorophore, potentiometric element or radioactive element that is measured by a device for detection. Any reaction sites with color indicate the presence of an enzyme. Any sites without color indicate that the enzyme was not present. In Figure 4, the presence of color in reaction sites 20, 21, 22, 24, and 25 indicate the presence of MMPs 1, 8, 9, and pro MMP1 respectively. The absence of color in 23 indicates that no hNE was detected. Advantageously, reaction sites for positive and negative controls can be provided.